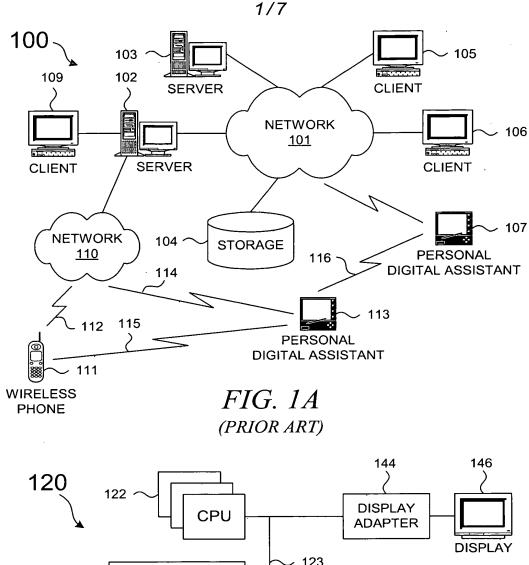


Method and system for a generic metadata-based mechanism to migrate relational data between databases



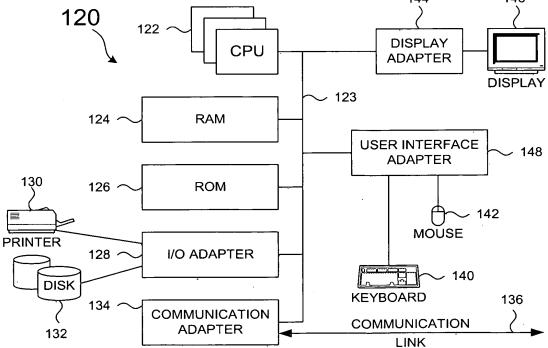


FIG. 1B (PRIOR ART)

Method and system for a generic metadata-based mechanism to migrate relational data between databases

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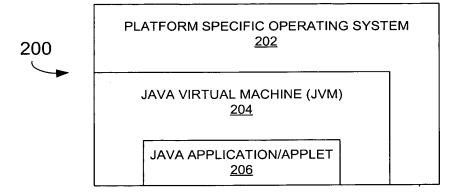


FIG. 2 (PRIOR ART)

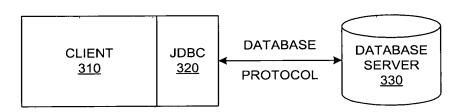


FIG. 3A (PRIOR ART)

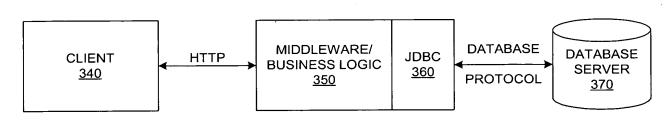


FIG. 3B (PRIOR ART)

## Method and system for a generic metadata-based mechanism to migrate relational data between databases

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	JAN 1 1 2005 00	-
R.	TO TRADENARY	_

AUTHOR_ID (PK)	NAME	URL	DESCRIPTION		
ADAM APON	ADAMS, JOHN APONE, KEVIN	HTTP:// HTTP://	"This author received an IEEE" "After spending ten years in"		
	•	-			
	•	•	•		
	•	-	•		

400 -

ISBN (PK)	AUTHOR_ID (PK)	SEQ_NO
0-08-882-111-4 0-07-456-432-1	ADAM APON	1 4
• .	•	•
	•	•
	•	•
	<del>└~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~</del>	L

BOOK\_AUTH\_TABLE 420

ISBN (PK)	TITLE	PUBLISHER_ID URL		PRICE
0-08-882-111-4 0-07-456-432-1	BEYOND THE ARTIC GUIDE TO JAVA	00989 01432	HTTP:// HTTP://	27.95 15.00
•		•	•	•
•	•		•	
•	•		•	•
BOOK_T/	ABLE 430		<u> </u>	

FIG. 4

Method and system for a generic metadata-based mechanism to migrate relational data between databases

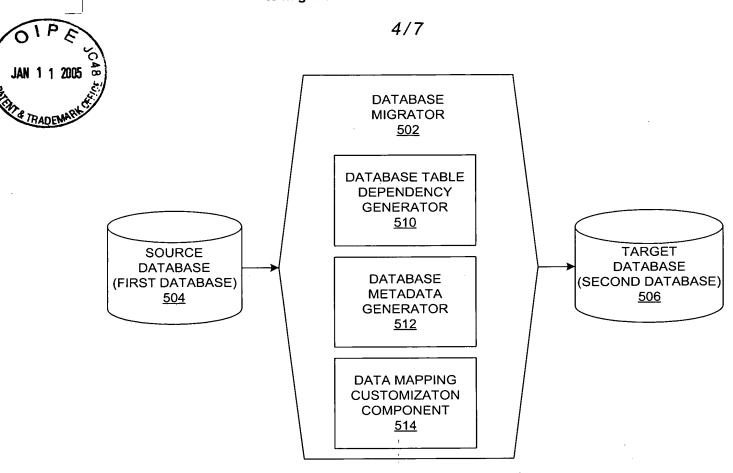


FIG. 5A

# JAN 1 1 2005 AB

#### U.S. Serial Number 09/717,818 Atty. Docket # AUS9-2000-0552-US1 George et al.

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5/7 **BEGIN** READ METADATA INFORMATION FROM SOURCE DATABASE 550 GENERATE TABLE DEPENDENCY INFORMATION FOR TABLES IN SOURCE DB <u>552</u> GENERATE METADATA INFORMATION ABOUT EACH TABLE IN SOURCE DB <u>554</u> IDENTIFY NEXT TABLE TO BE PROCESSED USING TABLE DEPENDENCY INFO 555 READ DATA FROM SOURCE DATABASE 556 APPLY CUSTOM MAPPINGS BETWEEN SOURCE DB AND TARGET DB <u>558</u> WRITE DATA TO TARGET DATABASE <u>560</u> MORE ROWS OF DATA IN THE CURRENT TABLE YES IN SOURCE DATABASE? 562 NO MORE TABLES TO BE MIGRATED FROM YES SOURCE DATABASE? <u>564</u> NO **END** 

FIG. 5B



#### Method and system for a generic metadata-based mechanism to migrate relational data between databases

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```
<Table name="AUTH_TABLE" numattributes="4">
                         <PrimaryKey>
                          <Field name="AUTHOR_ID" pos="1">
                                <Type> VARCHAR2 </Type>
                                <Nullable> FALSE </Nullable>
                                <Length> 20 </Length>
                           </Field>
FIG. 6A
                         </PrimaryKey>
                         <Field name="NAME" pos="2">
                               <Type> VARCHAR2 </Type>
                               <Nullable> FALSE </Nullable>
                               <Length> 40 </Length>
              610
                          </Field>
                          <Field name="URL" pos="3">
                               <Type> VARCHAR2 </Type>
                               <Nullable> FALSE </Nullable>
                                <Length> 1024 </Length>
                          </Field>
                          <Field name="DESCRIPTION" pos="4">
                               <Type> VARCHAR2 </Type>
                               <Nullable> FALSE </Nullable>
                               <Length> 512 </Length>
                          </Field>
                        </Table>
```

```
<MappingRecord TargetTablename="T_AUTH_TABLE" >
           <SourceTableName> AUTH TABLE /SourceTableName>
           <Field position="1">
              <TargetFieldName type= "String"> T AUTHOR_ID </TargetFieldName>
              <SourceFieldName> AUTHOR ID 
              <Truncatable> NO </Truncatable>
           </Field>
           <Field position="2">
              <TargetFieldName type= "String"> T_AUTHOR_NAME </TargetFieldName>
              <SourceFieldName> NAME </SourceFieldName>
              <Truncatable> NO </Truncatable>
           </Field>
           <Field position="3">
              <TargetFieldName type= "String"> T_URL </ClassField>
620
              <SourceFieldName> URL </SourceFieldName>
              <Truncatable> NO 
           </Field>
           <Field position="4">
              <TargetFieldName type= "String"> T_DESCRIPTION </TargetFieldName>
              <SourceFieldName> DESCRIPTION </SourceFieldName>
              <Truncatable> YES </Truncatable>
           </Field>
           <Field position="5" default="Unknown">
              <TargetFieldName type= "String"> T_LOCATION </TargetFieldName>
              <SourceFieldName></SourceFieldName>
           </Field>
         </MappingRecord>
```

FIG. 6B



#### Method and system for a generic metadata-based mechanism to migrate relational data between databases

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T_AUTHOR_ID	T_AUTHOR_NAME	T_URL	T_DESCRIPTION	T_LOCATION
AUTH TAE	BLE 630			

FIG. 6C

```
<Table Name="AUTH_TABLE">
       <PrimaryKey>
              <Field name="AUTHOR_ID" type="VARCHAR2"></Field>
       </PrimaryKey>
       <Dependent Name="BOOK_AUTH_TABLE">
              <ForeignKey>
                      <a href="#">Attribute position="1">
                             <Parent>AUTHOR_ID</Parent>
                             <Child>AUTHOR_ID</Child>
                      </Attibute>
              </ForeignKey>
       </Dependent>
</Table>
<Table Name="BOOK_AUTH_TABLE">
       <PrimaryKey>
              <Field name="ISBN" type="VARCHAR2"></Field>
       </PrimaryKey>
       <Dependent Name="BOOK_TABLE">
              <ForeignKey>
                      <a href="#">Attribute position="1">
                             <Parent>ISBN</Parent>
                             <Child>ISBN</Child>
                      </Attibute>
              </ForeignKey>
       </Dependent>
</Table>
<Table Name="BOOK_TABLE">
       <PrimaryKey>
              <Field name="ISBN" type="VARCHAR2"></Field>
       </PrimaryKey>
</Table>
```

FIG. 6D